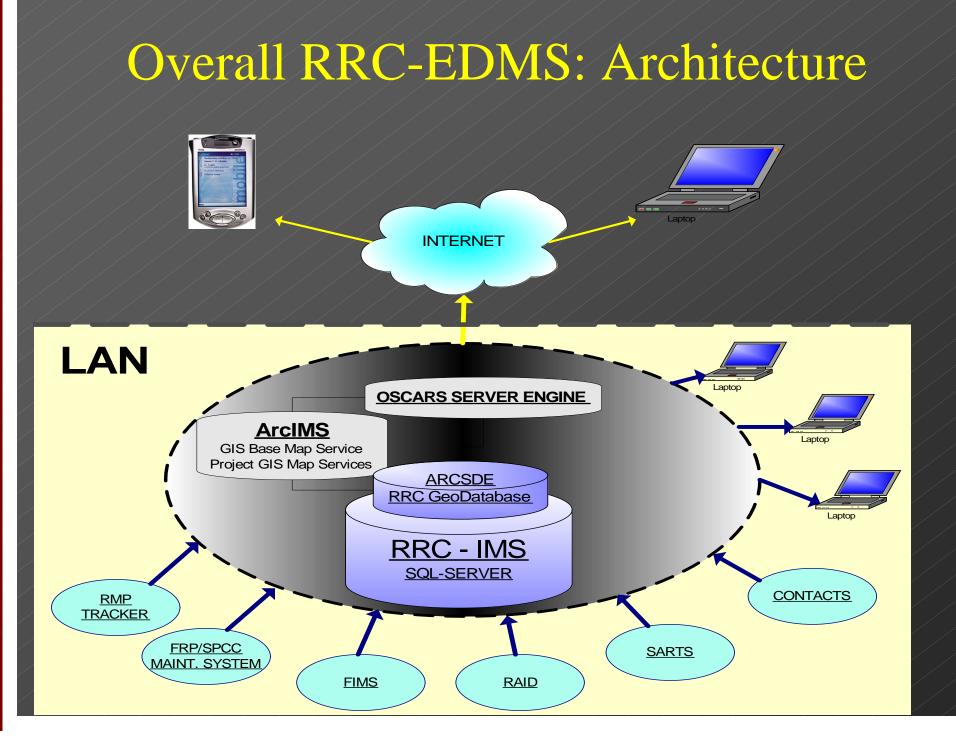
US ERA ARCHIVE DOCUMENT

Field Force Automation

Data Management Methodologies and Systems for Field Data Collection and Reporting

Region 6 Data Management

- Data is key component to all EPA operations.
- Historically, Data was often taken in log books, or in electronic formats that are incompatible or not designed for easy reporting/analysis.
- Goal is to incorporate into routine day to day operations data management standards to insure data quality and availability.
- Methodology for collecting data in a way that EPA/Contractors are able to access/analyze the data near real time (Emergencies, Reports, Day to Day Ops)
- The answer "Regional Response Center Enterprise Data Management System" or RRC EDMS.



Region 6 Web Hub

- Web hub provides one access point for all applications to EPA and START personnel.
- One username and password for access to each application

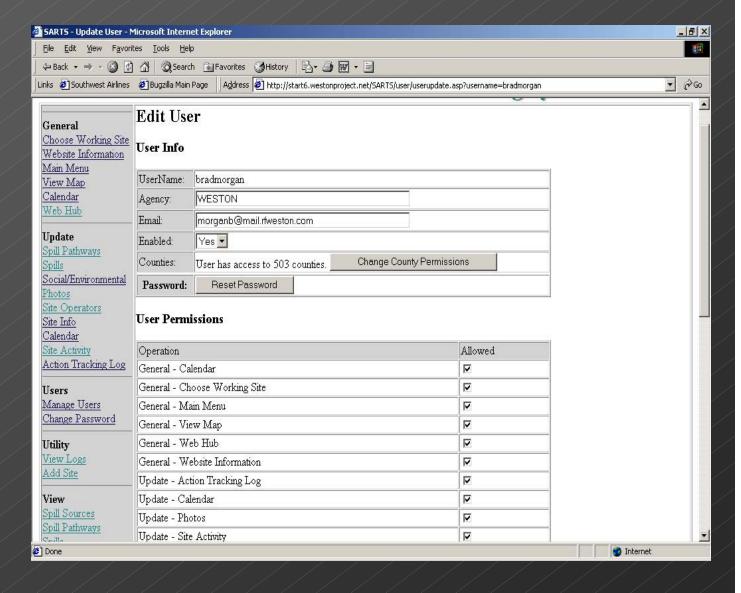
Web Hub

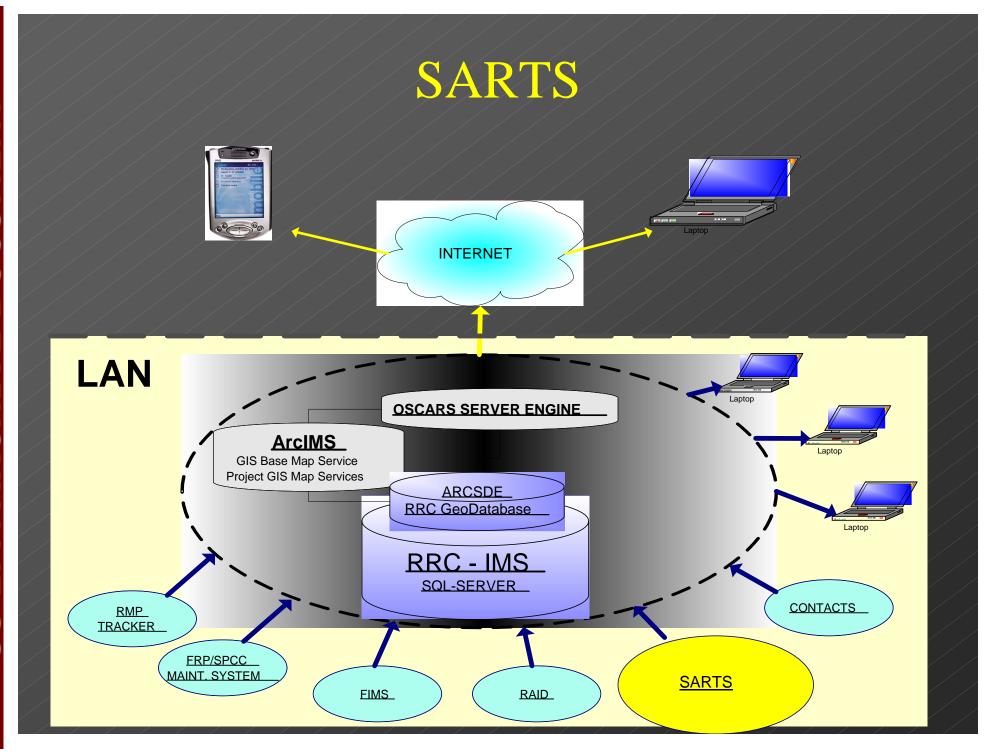
Websites

- Contact Management System
- EPA Exercise Registration
- FRP SPCC Tracking
- <u>Lake Oologah</u>
- EPA WEB HUB
- OSCARS
- SARTS
- Remote Monitoring

Region 6 Site Owner Administration

• Site Owners have ability to administer accounts through easy to use intuitive interface.





SARTS – OPA Recon Application

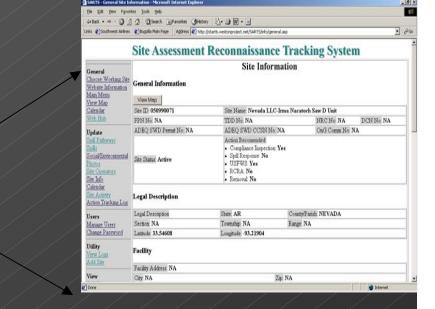


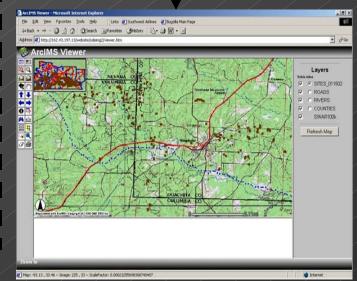




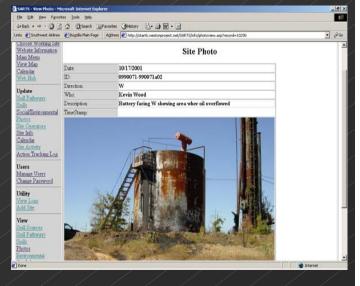
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Secure Web Applications

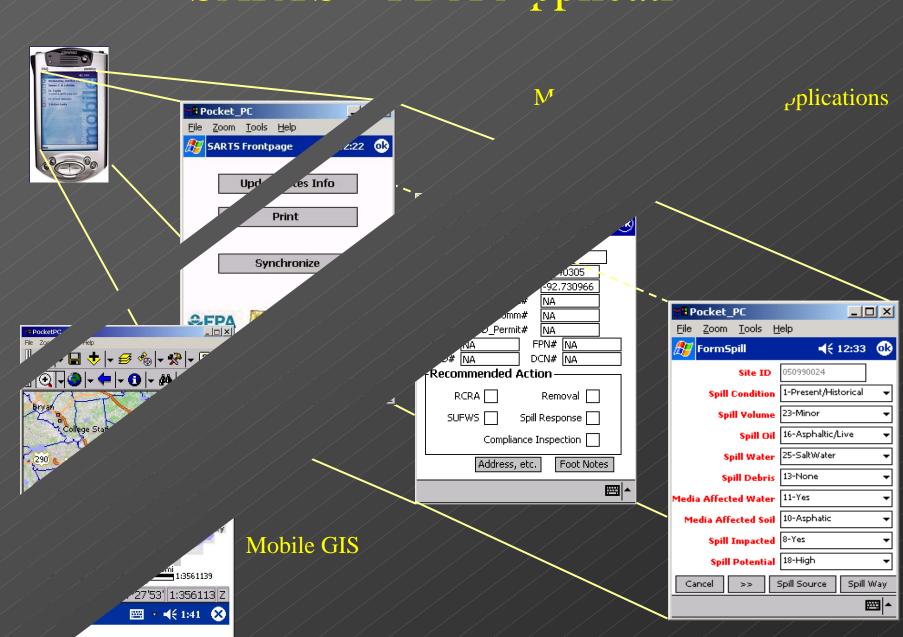




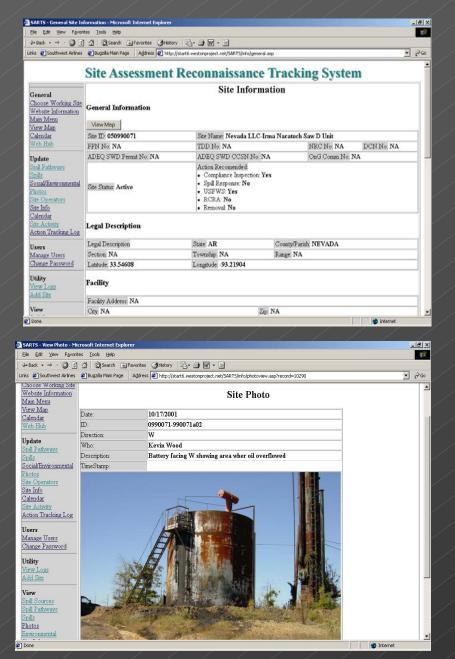
SARTS RDBMS

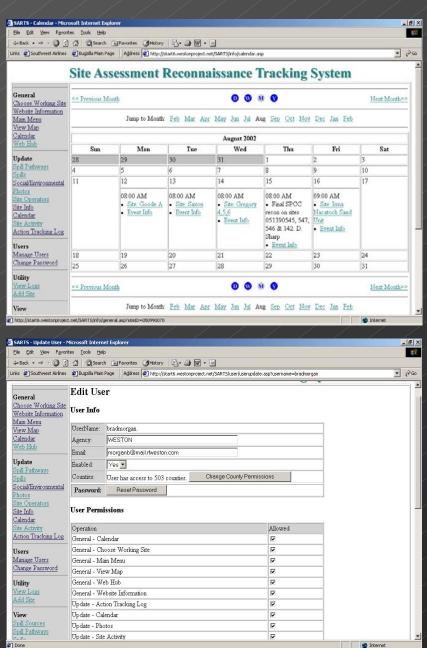


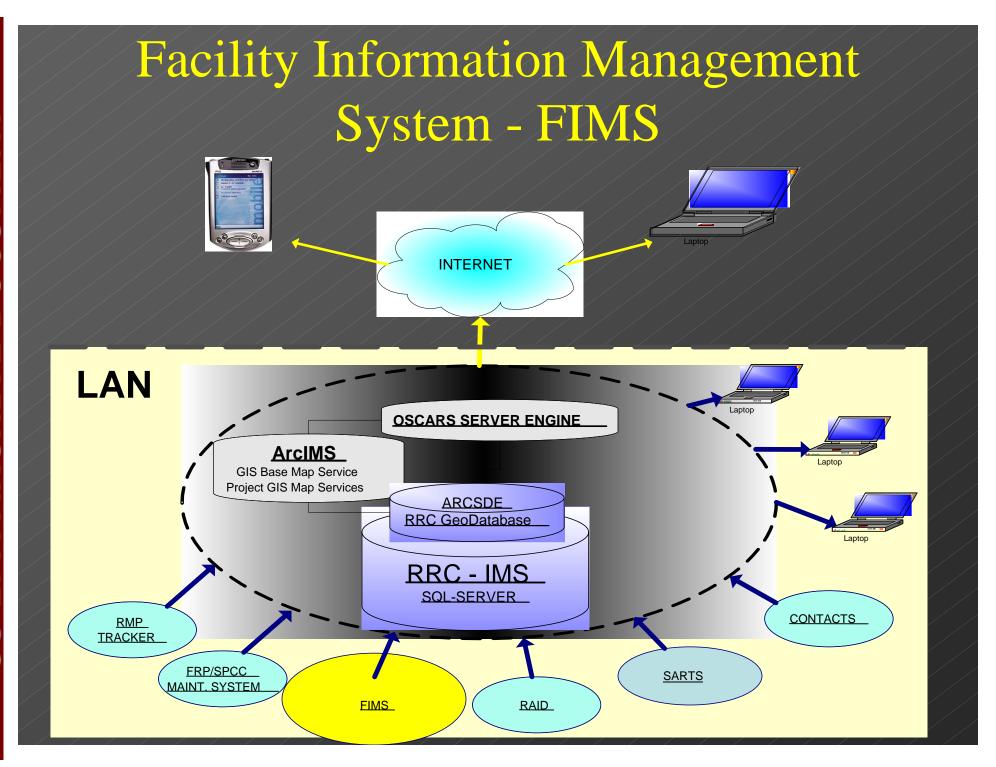
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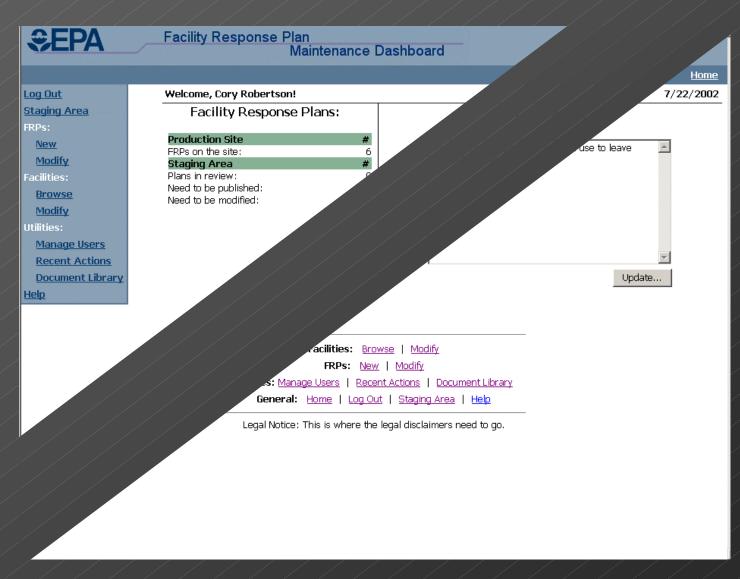
SARTS – Secure Web Site



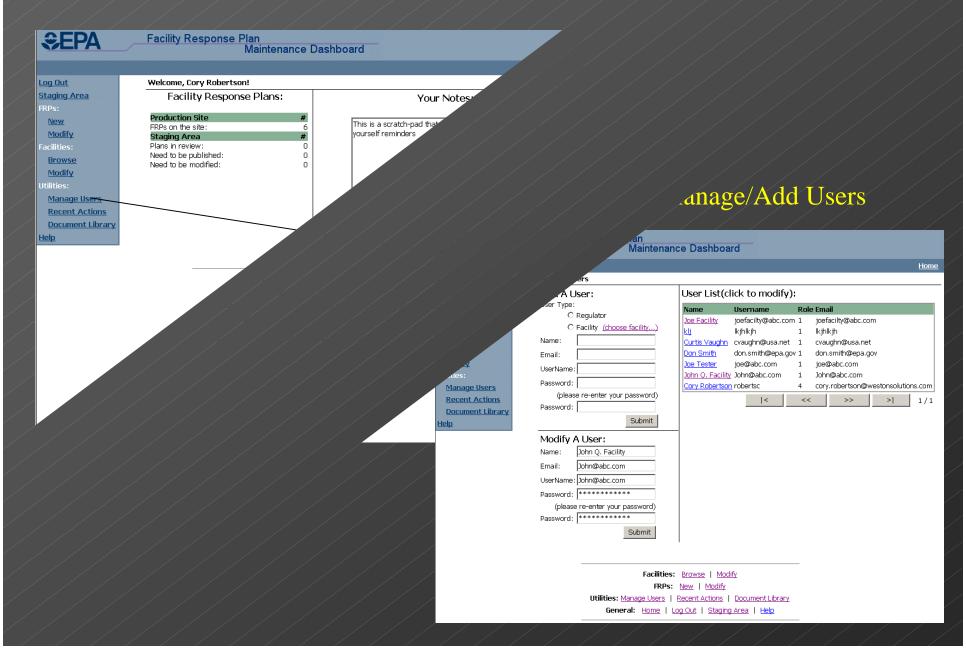




EPA/OSC Personalized Secure Web Interface

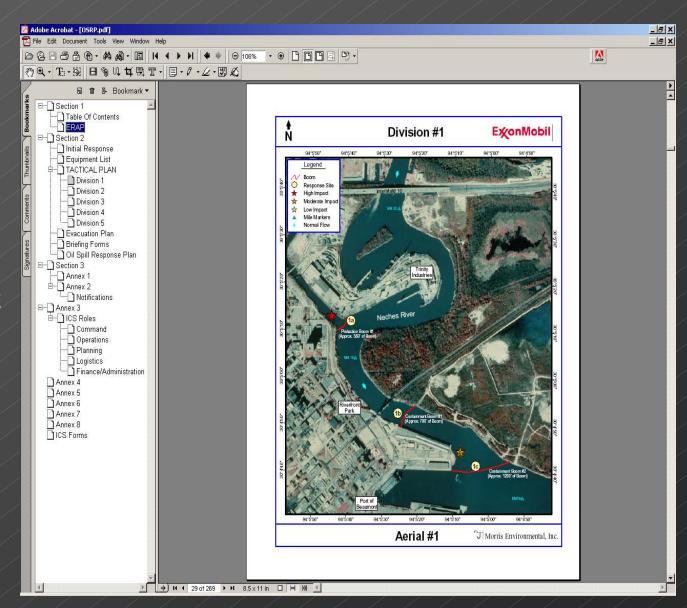


FRP - Integrated User Ma



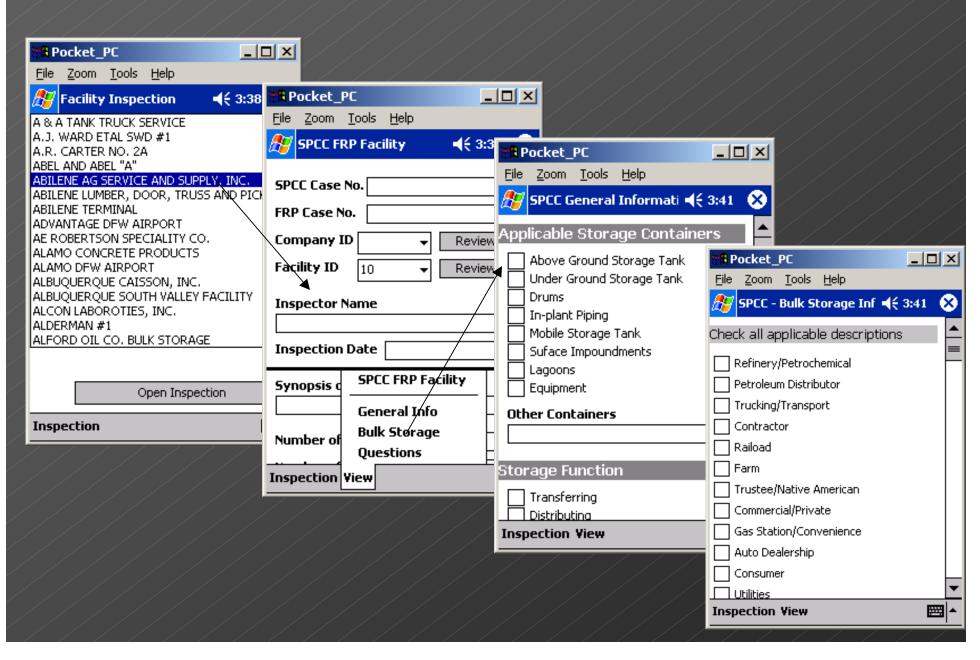
FRP – Uploaded Plan

- FRP's are one Click away
- FRP's can be
 Bit Served so
 User only
 downloads
 section of interest
- Immediate
 Access to ERAP,
 Facility
 Diagrams, and
 other important
 Data.



FRP/SPCC Tracking System **INTERNET** LAN **OSCARS SERVER ENGINE ArcIMS** GIS Base Map Service Project GIS Map Services ARCSDE RRC GeoDatabase RRC - IMS SQL-SERVER CONTACTS <u>RMP</u> TRACKER **SARTS** FRP/SPCC Tracker RAID **FIMS**

FRP/SPCC Inspection Tracking System



GIS PDA Applications

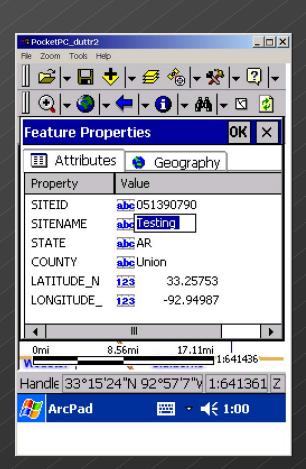
ArcPAD PDA GIS
Routing Capability



ArcPAD PDA Streets with Topographic Data

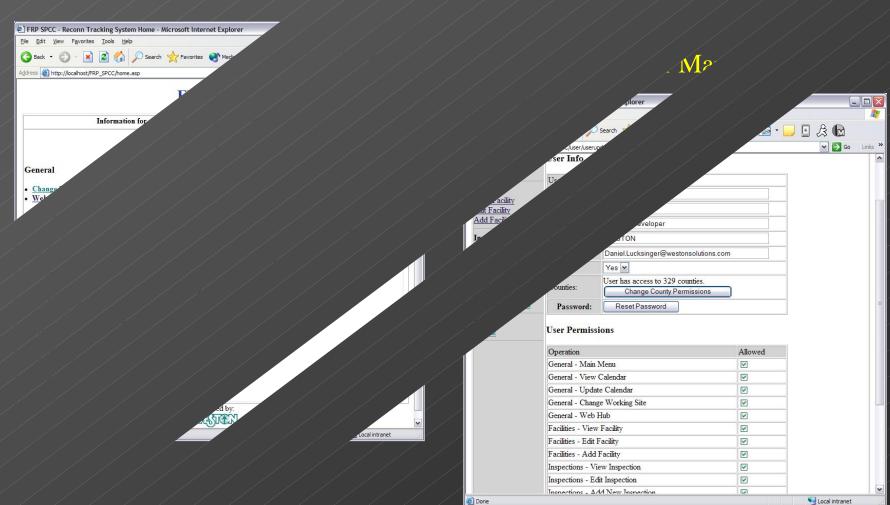


Disconnected Editing of GIS Layers



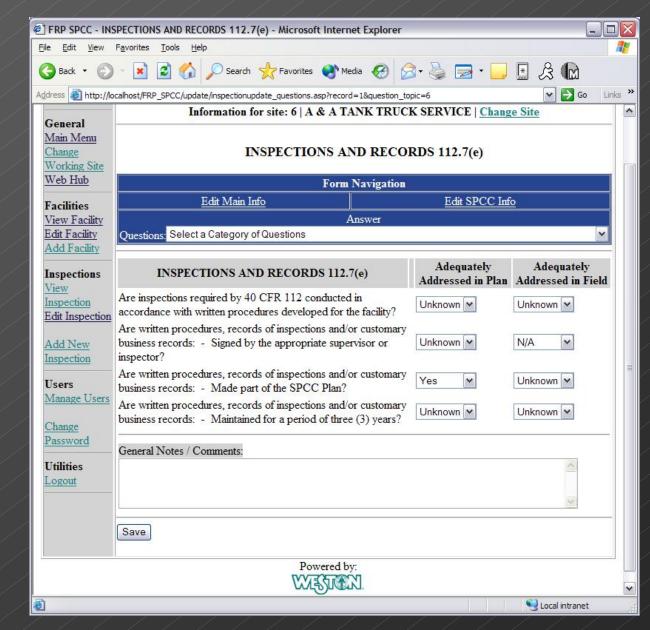
FRP/SPCC Inspection

Role-Based Menu Or

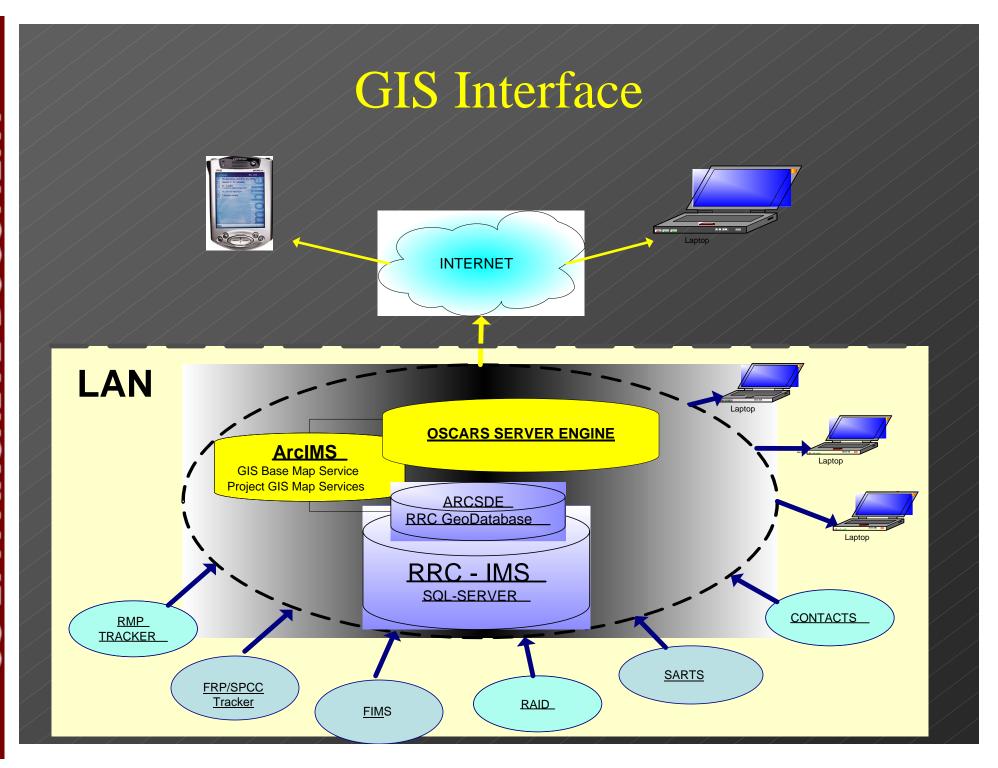


FRP/SPCC Inspection Tracking System

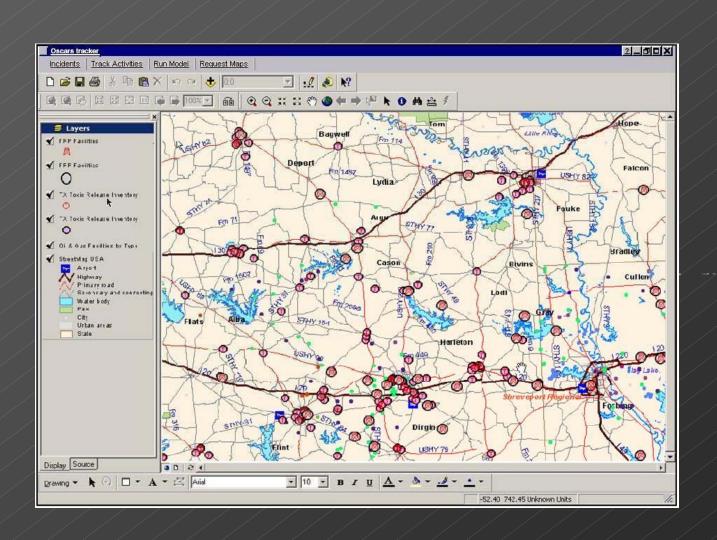
- Inspection checklist matches FIMS Review Checklist and PDA Application
- Reviewers can click a section and in automatically will take them to that portion of FRP.

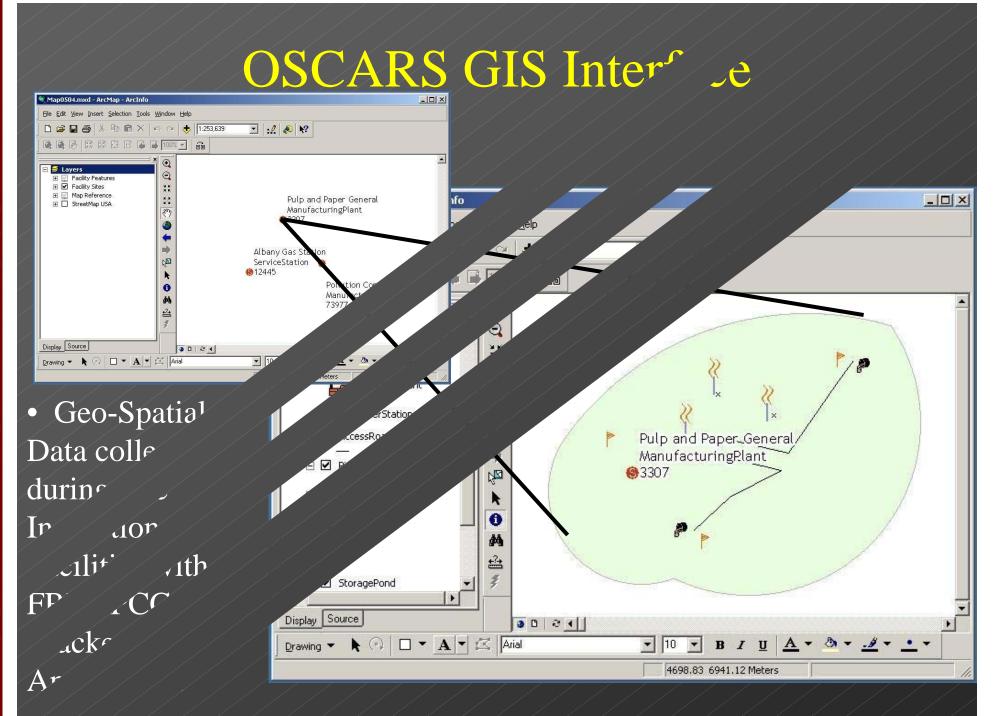


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CONTAINER	Inspection:				INSPECTION MEN	and Dian Dandam		
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Container	SPCC Inspector Name:		FRP Inspector Name:			Friendly		
	Team Members:		Team Members:		CONTAINER MEN	U - CENTED AL DE CHIDENTENERS ECD SDCC DI ANG 110 7 (- D		
	SPCC plan review by:		FRP plan review by:		CONTAINER MEN	on the second se		
	Date of review:		Date of review:		Add New Container	■ INSPECTIONS, TESTS AND RECORDS 112.7 (e)		
	Facility:	Facility Info	Select A Facility	J	Edit/View Container	■ PERSONNEL TRAINING AND DISCHARGE PREVENTION PROCEDURES 112.7 (f)		
	Name of Facility: EXX Latitude:	ON CO USA 53562 DO Longitude:	WDEN SPRING LAKI Sour			■ SECURITY (excluding oil production facilities) 112.7(g)		
	Address/Location: 832	1 LINE AVE						
	City: SHREVEPORT Facility Contact:	County/Parish: C	ADDO State Title	e: LA – Zip: 71106 :		■ FACILITY TANK CAR AND TANK TRUCK LOADING/UNLOADING		
	Telephone Number:		Ema	i1:		RACK (excluding offshore facilities) 112.7 (h-j)		
	Facility Owner: Name of Owner/Opera	tor:				■ FACILITY DRAINAGE 112.8 (b)		
	Corporate Address: City:		Stat	te: Zip:		■ BULK STORAGE CONTAINERS 112.8 (c)		
	Corporate Contact:		Titl	e:		■ FACILITY TRANSFER OPERATIONS, PUMPING, AND FACILITY		
	Telephone Number:		Em _	ail:		PROCESS 112.8 (d)		
	General Info: Synopsis of					■ SUBSTANTIAL HARM CERTIFICATION 112.20 (e)		
	Business: How many		NAICS#			E DODDIA! THE HAIR CERTIFICATION TIMES (C)		
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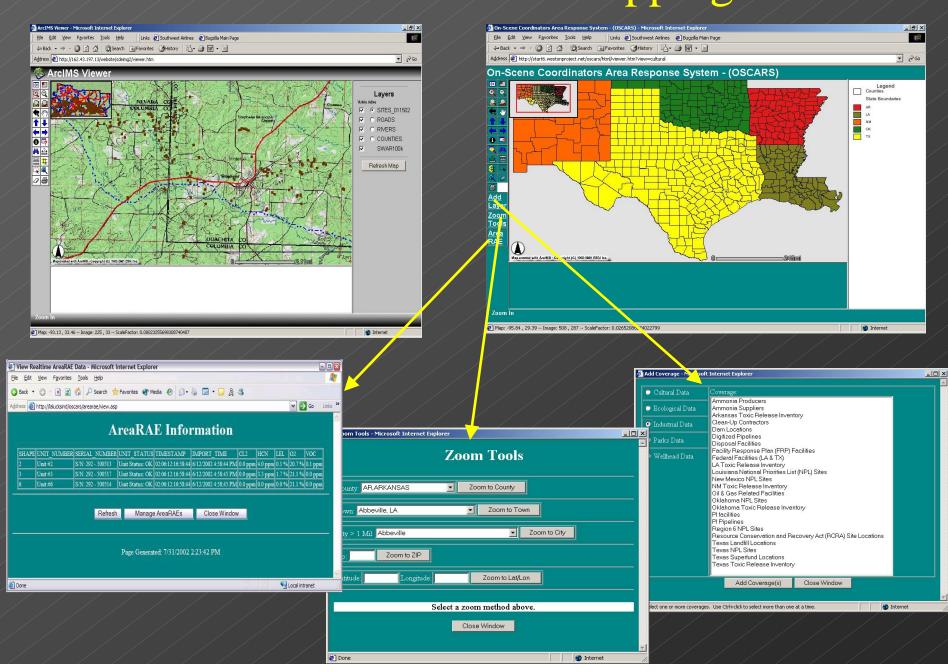


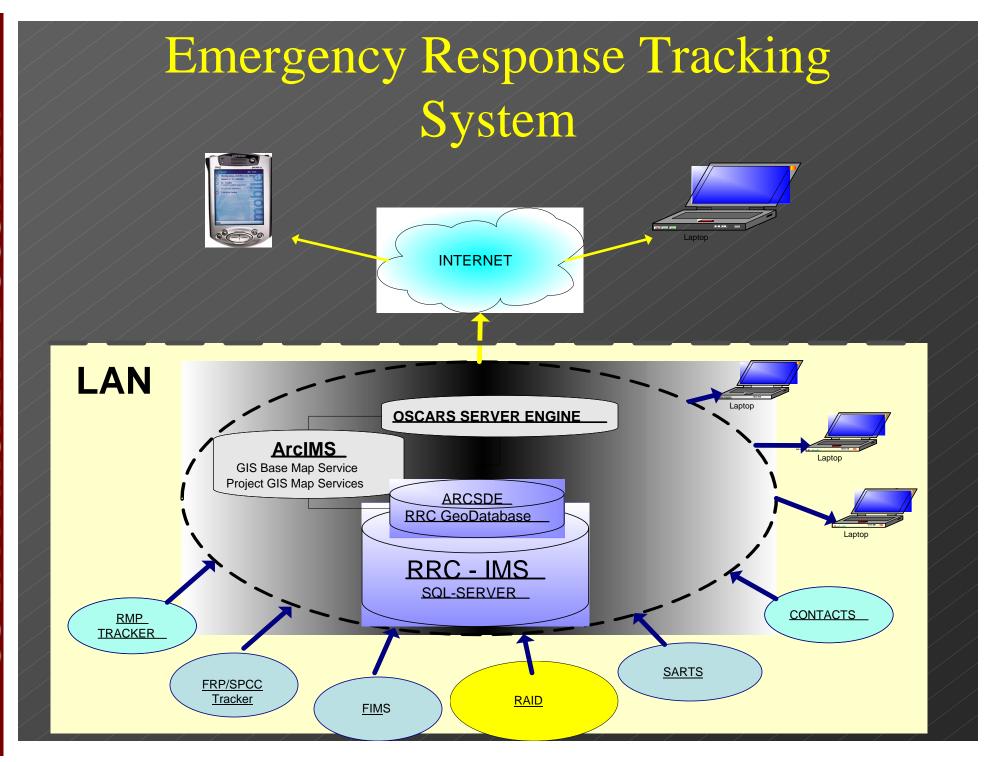
OSCARS GIS Interface - Tracker





OSCARS – Interactive Mapping Site





Emergency Response EDMS

Mobile Applications

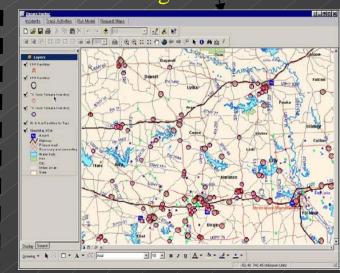


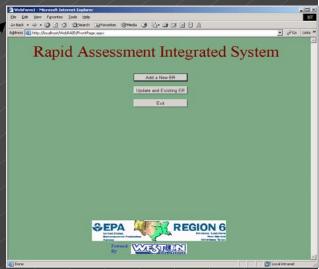


Secure Web Applications

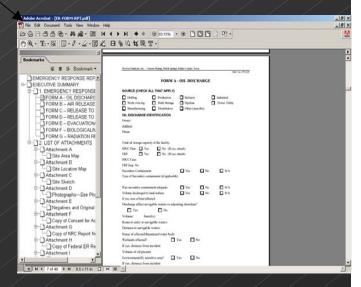


GIS based Incident Tracking



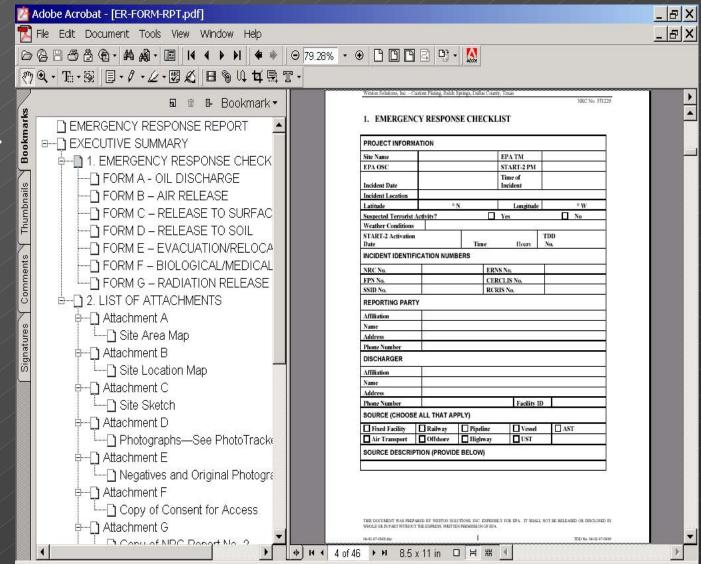


Auto Generated Final Reports



Emergency Response EDMS

- Reports are auto-generated in electronic format.
- Format consistent with Region 6 Electronic Deliverables Standard.
- Reports consistent with SDMS format.



COLUMBIA DISASTER DATA MANAGEMENT ASEREVIATED TIMELINE

Disaster Occurs

Saturday, February 1, 2003 8 a.m. Central Time

> 120 Weston Staff in field using 60 PDAs. STSR PDA application set to collect field data with digital cameras and GPS units.

> > Started photo and data uploading to Web applications.

Enhanced data loading application deployed.

Field End.

Sun Mon Tue Wed Thu Mon

Lufkin Command

Center Opens.

Feb.

20

250 Weston Field Personnel Deployed 250 PDAs Synchronized with Web server databases each night, uploading approx. 2,000 debris points per night.

EPA/START manages data for 3,000 total field personnel.

March-April

Operations

April May 30

Photo loading Scheduled to **Continue until** End of May.

February

NASA official arrives to oversee data/photo loading

Custom Web Interface in use including ArcIMS® mapping system

75,000 photos loaded into the database.

Weston continues To load approx. 2,000 photos per day.

May

START develops action plan, sets up field office.

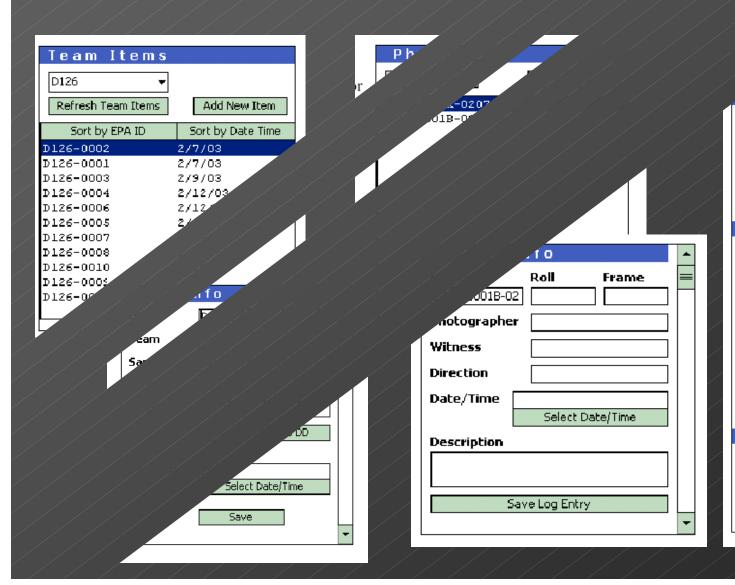
START gets call for Response. TeamLinkSM set up by 11 pm.

Weston managed data for FEMA, NASA, as well as the **EPA during the Columbia incident and Weston continues to** manage the data and perform field operations directly with NASA.

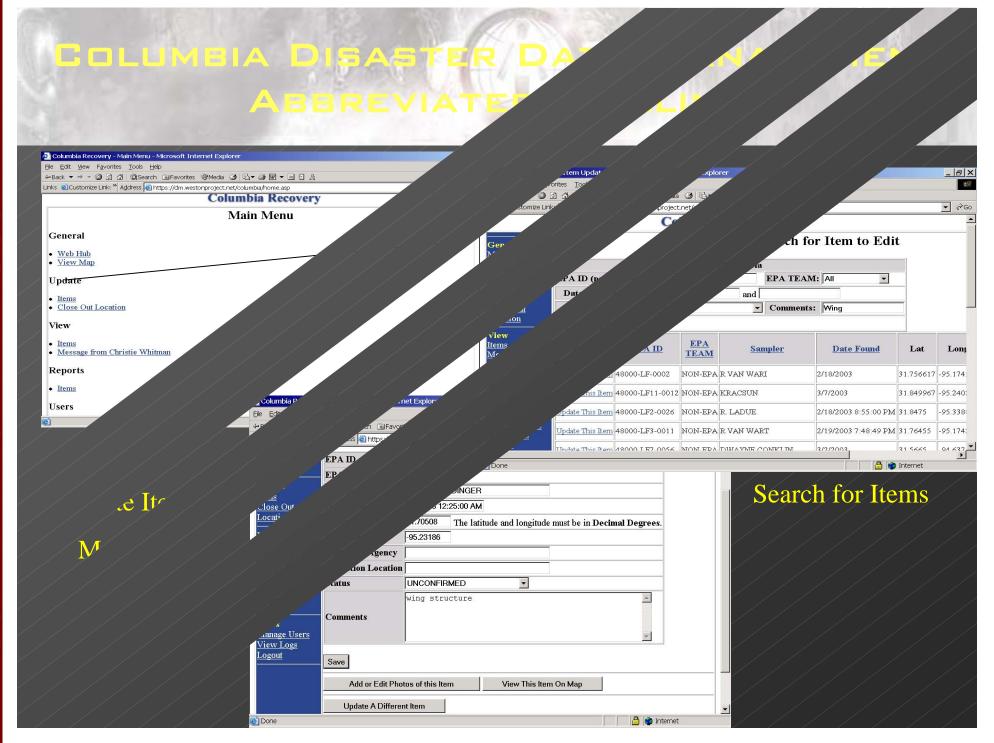


Technology @ WESTON

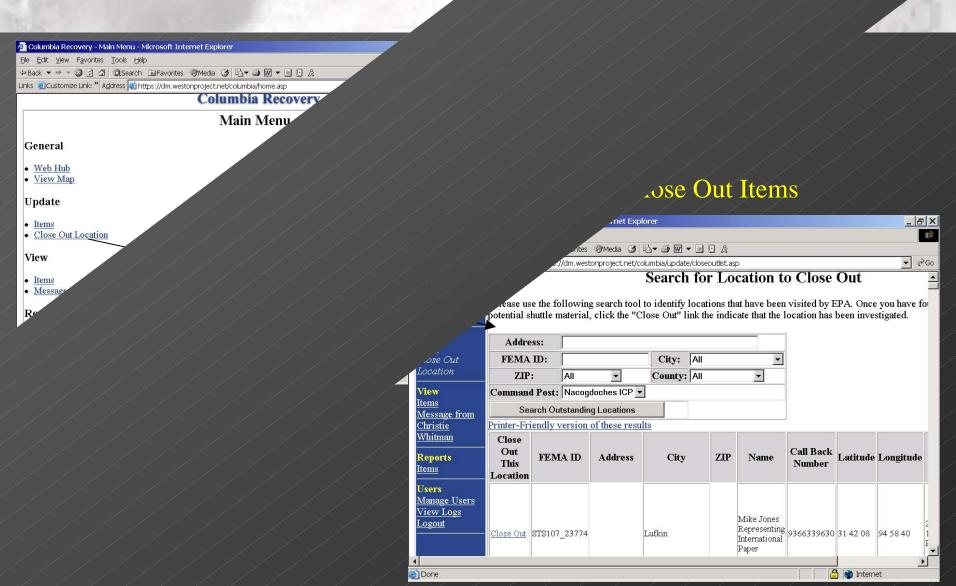
COLUMBIA DISASTER DATA ABBREVIATED



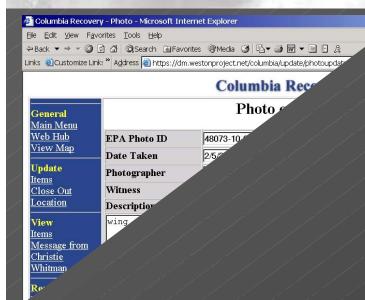
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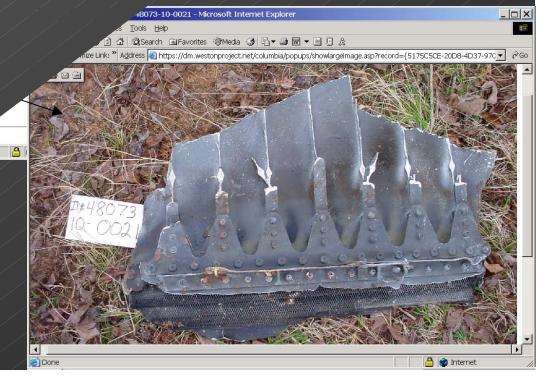
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COLUMBIA DISASTER D ABBREVIAT

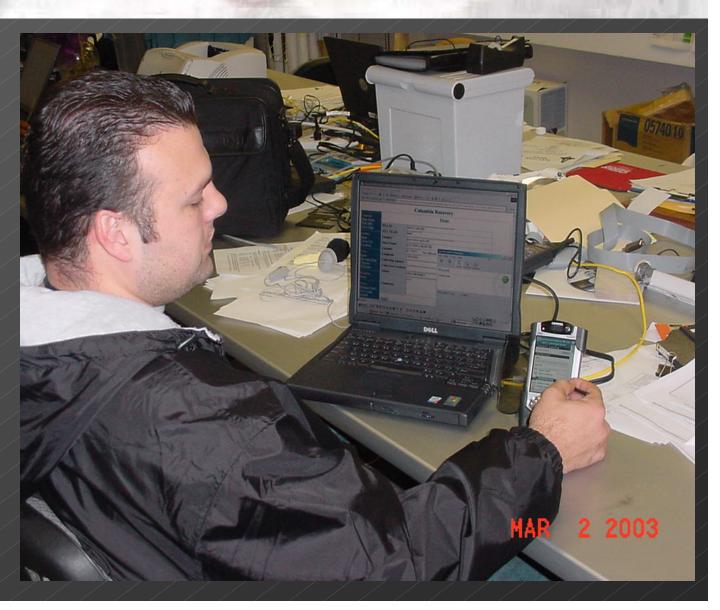


View Photos

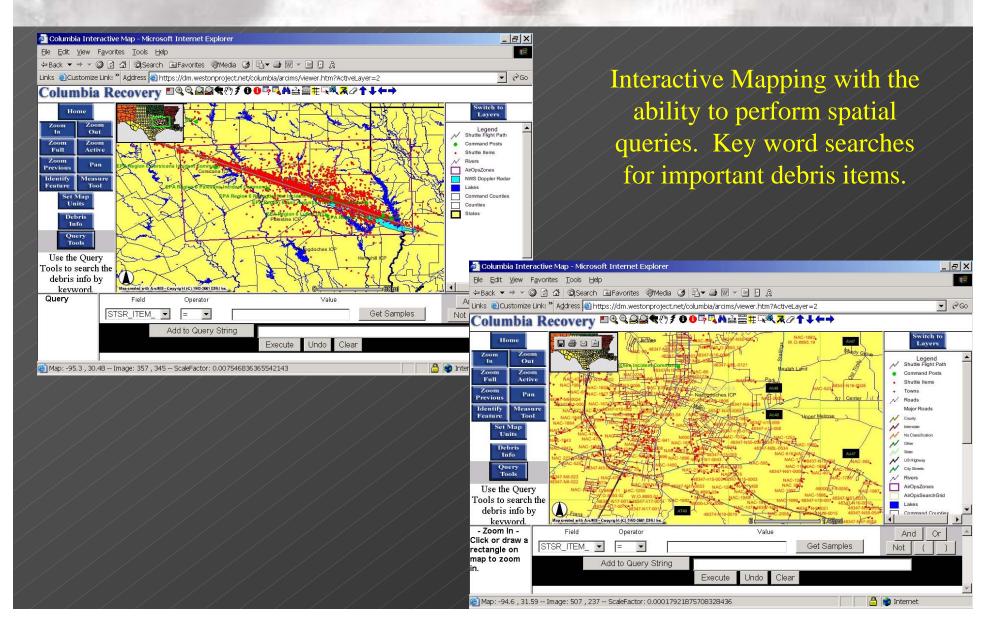


COLUMBIA DISASTER DATA MANAGEMENT ABBREVIATED TIMELINE

- Data
 Synchronization
 in the Lufkin
 Disaster Field
 Office.
- 250 PDA's per night had to by synchronized in 5 different field offices.



COLUMBIA DISASTER DATA MANAGEMENT ABBREVIATED TIMELINE



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